



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,339	03/25/2004	Hiroyuki Abe	118986	5450
25944	7590	06/03/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			DANG, PHUC T	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/808,339

Applicant(s)

ABE, HIROYUKI

Examiner

PHUC T. DANG

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 and 9 is/are rejected.
- 7) ☒ Claim(s) 4 and 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 032504 & 020205 & 03 i o σ S
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2818

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The office acknowledges receipt of the following items from the applicant:

Information Disclosure Statement (IDS) filed on May 25, 2004, February 2, 2005 and March 10, 2005.

Specification

3. The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-2, 5-6 and 9 are rejected under 35 U.S.C. 102 (b) as being anticipated by Rostoker et al., hereinafter "Rostoker" (U.S. Patent No. 5,340,978).

Art Unit: 2818

Regarding claims 1 and 9, Rostoker discloses an electronic apparatus includes an electro-optic device comprising:

a display portion (Fig. 3) having a plurality of display elements (302, Fig. 3) arrayed (col. 9, lines 3-5) on a transparent substrate (304, Fig. 3); and

a silicon nitride film (310, Fig. 3) formed between the display portion and the transparent substrate (304, Fig. 3),

the silicon nitride film (310, Fig. 3) having a plurality of apertures (312, Fig. 3) corresponding to positions of the respective display elements (302, Fig. 3).

Regarding claim 2, Rostoker discloses each of the display elements being an organic EL element [col. 14, lines 8-12].

Regarding claims 5, Rostoker discloses the silicon nitride film being an interlayer insulating film (310, Fig. 3) disposed between the display elements (302, Fig. 3) and a circuit element portion (col. 16, lines 21-25) including switching elements to drive the respective display elements [col. 15, lines 57-62].

Regarding claim 6, Rostoker discloses the open size of each aperture (312, Fig. 3) being equal to the display size of each display element (302, Fig. 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2818

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rostoker in view of Van Berkel (U.S. Patent No. 5,451,766).

Rostoker discloses all the features of the claimed invention as discussed above, but does not disclose the silicon nitride film being an underlying protective film disposed between the transparent substrate and a circuit element portion including switching elements (31, Fig. 4) to drive the respective display elements.

Van Berkel, however, discloses the silicon nitride film being an underlying protective film (col. 5, lines 65-66) disposed between the transparent substrate (2, Fig. 4) and a circuit element portion (4 and 10, Fig. 4) including switching elements (31, Fig. 4) to drive the respective display elements [col. 5, lines 53-60].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the above discussed teaching of Rostoker as taught by Van Berkel for a purpose of controlling the display elements on the transparent substrate.

Allowable Subject Matter

6. Claim 8 would be allowed.

The following is a statement of reason for the indication of allowable subject matter:

Claim 8 is considered allowable since the prior art of record and the considered pertinent to the applicant's disclosure does not teach or suggest the claimed invention having a step of forming a plurality of pixel electrodes on the display side of the silicon nitride film, the pixel electrodes having recesses corresponding to positions of the respective apertures and forming the organic El elements at bottom of the respective recesses.

Art Unit: 2818

Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

None of the prior art made of record does not disclose the open size of each aperture being larger than the display size of each display element as cited in claim 4 and a further comprising pixel electrodes to supply a current to the respective display elements, the pixel electrodes having surfaces and recesses in the surfaces in correspondence with positions of the respective apertures, the display elements being disposed at bottoms of the respective recesses as cited in claim 7.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuc T. Dang whose telephone number is (571) 272-1776. The examiner can normally be reached on 8:00 am-5:00 pm.

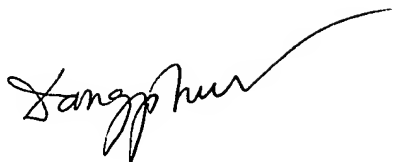
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571) 272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and After Final communications.

9. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Art Unit: 2818

Phuc T. Dang

PP

A handwritten signature in black ink, appearing to read 'Phuc T. Dang', with a long, sweeping horizontal stroke extending to the right.

Primary Examiner

Art Unit 2818